



Publication number:

0 443 301 A1

12

EUROPEAN PATENT APPLICATION

Application number: 90850392.3

Int. Cl.⁵: **F24C 15/20**

Date of filing: 05.12.90

Priority: 20.02.90 SE 9000607

Date of publication of application:
28.08.91 Bulletin 91/35

Designated Contracting States:
CH DE DK ES FR GB IT LI

Applicant: **AKTIEBOLAGET ELECTROLUX**
Luxbacken 1
S-105 45 Stockholm(SE)

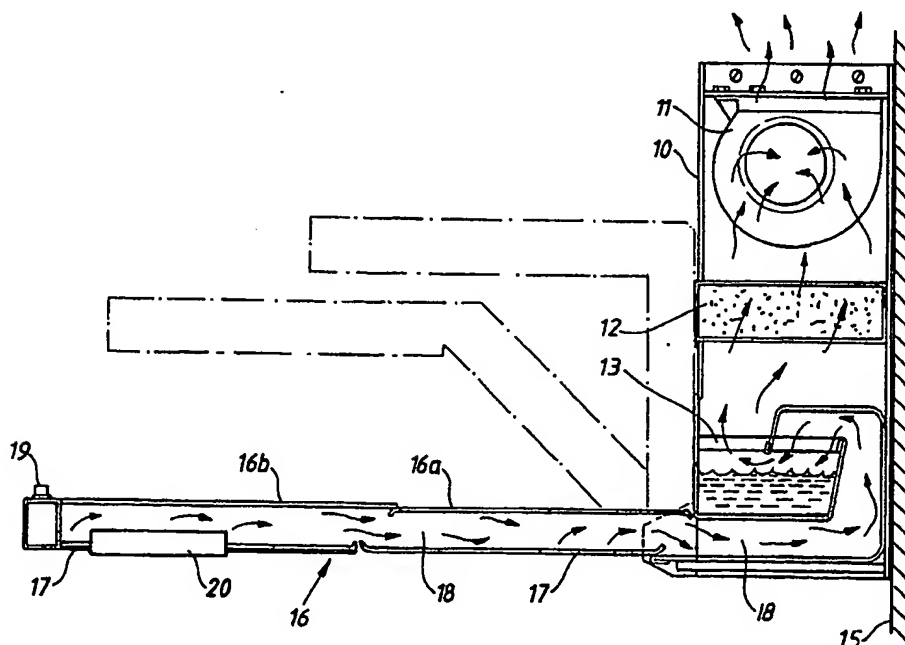
Inventor: **Castwall, Lennart Wilhelm**
Akerbyvägen 82
S-183 35 Täby(SE)

Representative: **Hagelbäck, Evert Isidor et al**
c/o AB Electrolux Corporate Patents & Trademarks
S-105 45 Stockholm(SE)

154 **Kitchen ventilator.**

157 A kitchen ventilator comprises a housing (10) provided with a suction fan (11). An inlet member (16) is movably connected to the housing so as to be vertically adjustable and has at least one inlet

opening (17) connected to the suction fan (11) via a duct (18). The inlet member (16) may optionally be provided with a heat radiant source (20).



EP 0 443 301 A1

The present invention relates to a kitchen ventilator comprising a housing having a suction fan and a vertically adjustable inlet member provided with at least one inlet opening connected via a duct to said suction fan.

Kitchen ventilators of this kind are used with cookers in order to suck in and purify or remove fumes generated during cooking.

It is a problem in connection with such ventilators to catch the cooking fumes effectively in order to prevent their spreading in the room. To this end it is customary to use a hood or an extensible screen provided above the cooker. In order not to be an obstacle during the cooking such devices must, however, be located relatively high above the top of the cooker and have therefore proved to be unsatisfactory for the intended purpose, at least if the gas flow through the ventilator is to be kept at a reasonable level, which is of course preferable.

The object of the present invention is to provide a kitchen ventilator which ensures a more effective catching of cooking fumes than has been possible by the constructions used hitherto. This has been achieved by means of a kitchen ventilator of the kind mentioned in the introductory, which according to the invention is characterized in that the inlet member is pivotally connected to the housing.

The invention will be described in more detail below with reference to the accompanying drawing which illustrates a cross-section of the kitchen ventilator according to the invention.

The kitchen ventilator shown in the drawing comprises a housing 10 which contains a suction fan 11, an odour filter 12 and a fat separator 13. As shown, the housing is attached to a wall 15 but might as well be mounted on a cooker (not shown) by means of suitable brackets and at an appropriate distance above the top of the cooker.

The housing has an inlet member 16 which is pivotally attached to the bottom portion thereof and is provided with inlet openings 17 which are connected to the fat separator 13 via a duct 18. The inlet member 16 has such length and width as to generally cover an underlying cooker top and comprises a first link arm 16a and a second link arm 16b. The two link arms are interconnected by means of a parallelogram mechanism which allows the second, outer link arm 16b to be moved in parallel as is shown in broken lines on the drawing. The link arms can be adjusted and latched in any preferred position between the shown lower position in which they are mutually aligned, and the upper position in which they are mutually perpendicular. For the adjustment, the latch is released by means of a press button 19.

In the shown lower position, the inlet member 16 is at a relatively small distance above the cook-

er top and the cooking vessels thereon, which ensures that cooking vapours are effectively sucked in. From this position the inlet member can be raised easily to a preferred position to facilitate the access of the cooking vessels. Air and vapour entering through openings 17 flow through duct 18 to the fat separator 13 which comprises a container filled with liquid. The duct 18 is shaped such as to bring the gas flow into close contact with the liquid surface in order to obtain condensation and separation of fat and water vapour. The gas flow is subsequently passed through the odour filter 12 which contains for example carbon or some other odourants absorbing material. The air thus purified can subsequently be recirculated to the room via the fan 11.

The described ventilator may optionally be combined with a heat radiant source 20 to be used for cooking together with a corresponding heat radiant source or conventional hot-plate (not shown) on the underlying cooker top. Due to the fact that the heat radiant source 20 is adjustable by means of the shown device to an appropriate distance above the cooker top, a rapid and efficient cooking is provided. The heat radiant source 20 preferably comprises a halogen lamp provided with a protective cover of ceramic glass.

Claims

1. Kitchen ventilator comprising a housing (10) having a suction fan (11) and a vertically adjustable inlet member (16) provided with at least one inlet opening (17) connected via a duct (18) to said suction fan, **characterized** in that the inlet member (16) is pivotally connected to the housing (10).
2. Kitchen ventilator according to claim 1, **characterized** in that the inlet member (16) comprises a first link arm (16a) pivotally connected to the housing (10), and a second link arm (16b) pivotally connected to said first link arm by means of a parallelogram mechanism allowing a parallel displacement of said second link arm.
3. Kitchen ventilator according to claim 1 or 2, **characterized** in that the inlet member (16) is adjustable to an optional position in relation to the housing (10).
4. Kitchen ventilator according to any of claims 1 - 3, **characterized** in that the housing comprises a fat separator (13) and/or an odour filter (12).
5. Kitchen ventilator according to any of claims 1

- 4, characterized in that the inlet member (16) is provided with a heat radiant source (20).

5

10

15

20

25

30

35

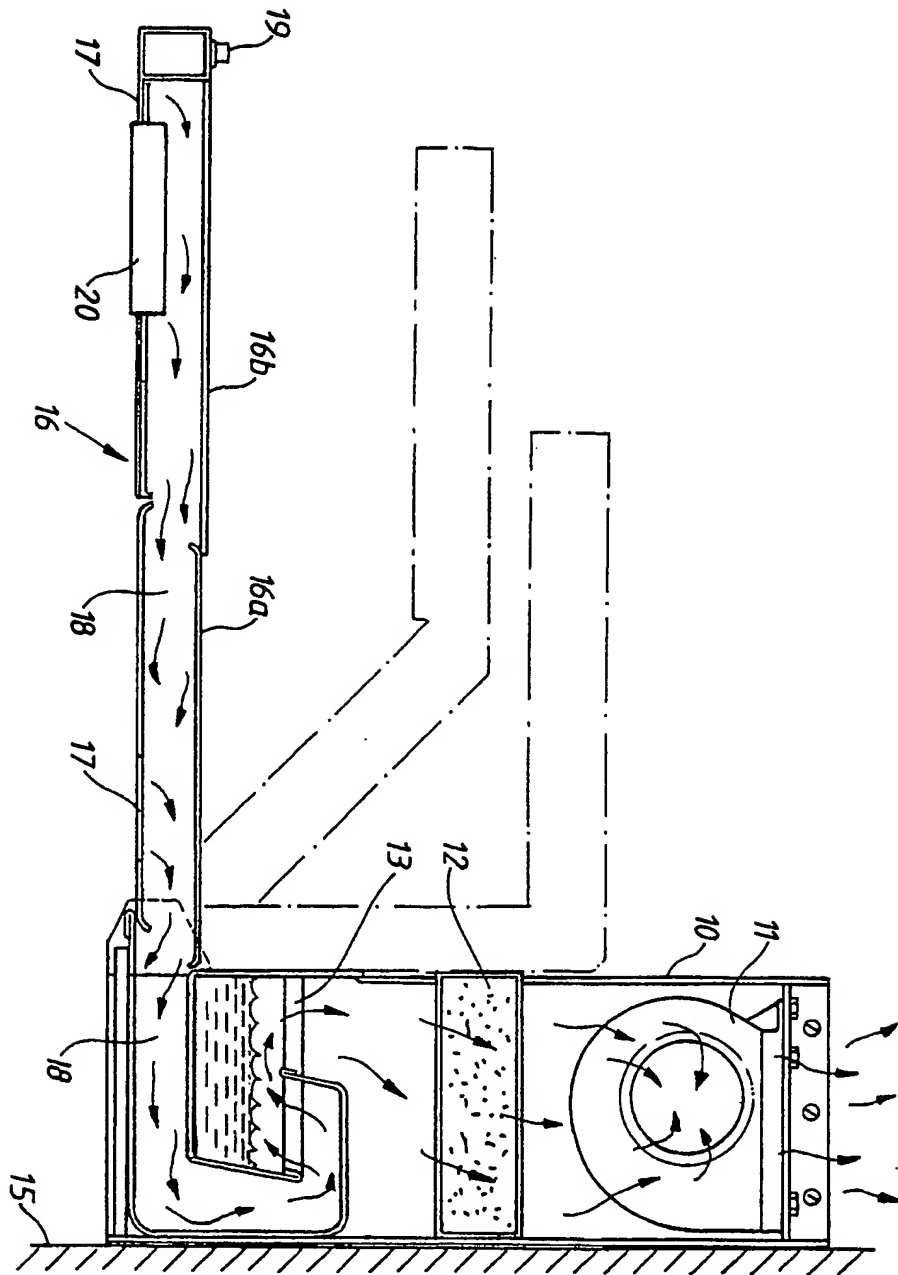
40

45

50

55

3





European
Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 85 0392

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	US-A-2 974 663 (HUMBERT) * the whole document * - - -	1,2	F 24 C 15/20
A	US-A-3 537 442 (BERGER) * column 2, lines 7 - 80; figures 1, 2 * - - -	1,3-5	
A	DE-A-3 503 236 (LICENTIA PATENT- VERWALTUNGS-GMBH) * claims 1-7; figure 1 * - - -	1	
A	US-A-2 554 694 (BELT) - - -		
A	DE-A-3 436 999 (LICENTIA PATENT- VERWALTUNGS-GMBH) - - - - -		
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		21 May 91	VANHEUSDEN J.
<div>CATEGORY OF CITED DOCUMENTS</div> <div>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention</div> <div>E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &: member of the same patent family, corresponding document</div>			